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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/027,345	12/20/2001	Steve Y. Chang	884.690US1	9612

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EXAMINER	
PHAN, THANH S	

ART UNIT	PAPER NUMBER
2841	

DATE MAILED: 02/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

H-A

Office Action Summary	Application No.	Applicant(s)	
	10/027,345	CHANG ET AL.	
	Examiner	Art Unit	
	Thanh S. Phan	2841	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 December 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-61* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-61* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 3, 5, 7, 8-10, 12-16, 18-24, 27-31, 33, 36, 39-50, 52, 53, 55, 56, rejected under 35 U.S.C. 103(a) as being unpatentable over Collins et al. in view of Sakakibara et al. [US 4,681,712].

Regarding claims 1, 13, 27, 28, 33, 43, Collins et al. disclose an electromagnetic interference (EMI) shield [14] comprising: a waveguide body including an array of waveguide cells [18] each having a contiguous inner surface; and an absorbing layer [column 2, lines 60-61] covering at least a portion of each contiguous inner surfaces and capable of absorbing electromagnetic radiation over a select frequency range [column 3, line 29-34].

Collins et al. disclose the claimed invention except for wherein the absorbing layer including an epoxy resin with particles having high magnetic loss tangent.

Sakakihara et al. teaches wherein an absorbing coating/layer including epoxy resin with particles is applied on the surface of a molding product [column 2, line 51 +].

Collins et al. and Sakakibara et al. are analogous art because they are from the same field of endeavor to make molding products.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the teachings of Sakakibara et al. with the product of Collins et al. for the purpose of providing a function to absorb electromagnetic waves.

Regarding claims 3, 15, 36, 53, Collins et al. disclose wherein each waveguide cell has a circular cross-section [figures 2-3].

Regarding claims 5, 14, Collins et al. disclose wherein the absorber layer covers the entire contiguous inner surface [column 3, lines 3-17].

Regarding claims 7, 29, 30, Collins et al. and Sakakibara et al. disclose that the resistivity of the absorber layer is **about** the claimed range.

Regarding claims 8, 39, 40, Collins et al. disclose wherein the waveguide body is formed of an insulating material [column 3, lines 3-17].

Regarding claims 10, 18, Collins et al. disclose wherein the wherein the select frequency range includes frequencies in the megahertz (MHz) range and the gigahertz (GHz) range [column 3, lines 29-34].

Regarding claims 19, 20, 21, 31, 46, 47, 52, 55, 56, Collins et al. disclose a computer [figure 3] comprising a metal chassis [10] having an aperture [not explicitly numbered], the chassis adapted to enclose portions of the computer that generates heat and EMI over a select range [a computer which having at least one electronic components such as a CPU chip]; and an EMI waveguide shield [14] fixed to the chassis and covering the aperture, the EMI waveguide shield including an array of waveguide cells [18] each having a contiguous inner surface and an absorber layer

[column 2, lines 60-61] covering at least a portion of each contiguous inner surface, the absorber layer capable of absorbing the EMI.

Collins et al. disclose the claimed invention except for wherein the absorbing layer including an epoxy resin with particles having high magnetic loss tangent.

Sakakihara et al. teaches wherein an absorbing coating/layer including epoxy resin with particles is applied on the surface of a molding product [column 2, line 51 +].

Collins et al. and Sakakibara et al. are analogous art because they are from the same field of endeavor to make molding products.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the teachings of Sakakibara et al. with the product of Collins et al. for the purpose of providing a function to absorb electromagnetic waves.

Regarding claim 22, Collins et al. disclose wherein the waveguide shield includes a body formed from an insulator [column 2, lines 55+].

Regarding claims 23, 24, the method steps are necessitated by the apparatus discloses by Collins et al. and Sakakibara et al.

Regarding claims 9, 12, 16, 19, 39-42, 44, 45, 48-50, Collins et al. and Sakakibara et al. disclose the claimed invention except for the specific material used.

It is old and well known in the technology to use or have more than one type(s) of material as insulating materials depend upon the material characteristic.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to a specific material for manufacturing a product, since it has been held to be within the general skill of a worker in the art to select a known material on the

basis of its suitability for the intended use as a matter of engineering choice. In re Leshin, 125 USPQ 416.

Regarding claim 34, Collins et al. disclose the claimed invention except for the specific dimension of the apertures.

It is old and well known in the technology to provide a specific dimension for a component(s) to meet its functional specification.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made use a specified dimension, since such a modification would have been involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955).

Claims 2, 4, 15, 35, 12 and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Collins et al. and Sakakibara et al. in view of Mitchell [6,426,459].

Regarding claims 2, 12 and 54, Collins et al. and Sakakibara et al. disclose the instant claimed invention except for: each waveguide cells having a polygonal crosssection, and the shield being formed of a metallic material.

Mitchell discloses a waveguide shield [10] formed of metal having polygonal shape cells.

It would have been obvious to a person having ordinary skill in the art at the time invention was made to use the shield design of Mitchell for the shield design of Collins et al. for the purpose of improving ventalation.

Regarding claims 4, 15, 35 and 54, Collins et al. as modified by Mitchell does not discloses the specific claimed shaped. However, it would have been obvious to modify Collins et al. as modified by Mitchell by having a specific shapes cell with different type of configurations since applicant have presented no explanation that these particular configurations of the cells are significant or are anything more than one of numerous configurations a person of ordinary skill in the art would find obvious for the purpose of providing a cross section between the two walls. A change in shape is generally recognizing as being within the level of ordinary skill in the art. In re Dailey, 149 USPQ 47 (CCPA 19760).

Claims 11, 50, 57-61 rejected under 35 U.S.C. 103(a) as being unpatentable over Collins et al. and Sakakibara et al. as applied to claims 1 13, 19, 23, 27 and 46 above, and further in view of Applicant Admitted Prior Art; AAPA hereinafter.

Regarding claims 11, 50, 57-61, Collins et al. and Sakakibara et al. discloses the claimed invention except for the material used is a C-RAM-type.

AAPA disclose a suitable material for absorber layer is called C-RAM.

Collins et al. and Sakakibara et al. and AAPA are analogous art because they are from the same field of providing EMI capability.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to use the material as suggested by AAPA with Collins et al., as modified, for the purpose of achieving and/or controlling the a specified range of frequencies.

Claims 6, 17, 25, 32, 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Collins et al. and Sakakibara et al. in view of Clement et al. [US 6,809,254].

Collins et al. and Sakakibara et al. disclose the claimed invention except for the thickness of the absorbing layer is between .025 mm and .25 mm

Clement et al. disclose an electronics enclosure having an interior shielding comprising a shielding layer [14] having a thickness between .025 mm and .25 mm

Collins et al., Sakakibara et al. and Clement et al. are analogous art because they are from the same field of endeavor to make products with EMI shielding capability.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to use an absorbing layer having a thickness between .025 mm and .25 mm as teach by Clement et al. with Collins et al., as modified, to effectively providing EMI shielding.

Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Collins et al., as modified, in view of Pierce [US 5,431,974].

Regarding claim 26, Collins et al., as modified, disclose the claimed invention except for using screws to attach the shielding to the chassis would have been obvious in order to securely mounted the shield thereto.

Pierce teaches that it is known to use screws, bolts and the like with an electromagnetic radiation shielding filter assembly [column 3, line 20-22].

Collins et al., as modified, and Pierce are analogous art because they are from the same field of endeavor.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to use the teachings of Pierce with Collins et al., as modified, to facilitate the attachment of the shielding assembly to a surface.

Response to Arguments

Applicant's arguments with respect to claims 1-61 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh S. Phan whose telephone number is 571-272-2109. The examiner can normally be reached on M-F 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamand Cuneo can be reached on 571-272-1957. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800

tsp